



RECEIVED

JAN 29 2016

AWMD/RCAP

January 27, 2016

CERTIFIED MAIL: 7013 2250 0001 0126 5834 Return Receipt Requested

U.S. Environmental Protection Agency Region 7 Attn: Chief. RCRA Corrective Action and Permits Branch Air. RCRA and Toxics Division 11201 Renner Boulevard Lenexa, Kansas 66219

RE: 4th QUARTER 2015 QUARTERLY PROGRESS REPORT; OCCIDENTAL CHEMICALS CORPORATION, WICHITA PLANT; USEPA ID# KSD007482029

Dear Sir:

Enclosed please find the Quarterly Progress Report, as required by Occidental Chemical Corporation's RCRA hazardous waste permit number KSD007482029. This report summarizes the activities conducted for Part II of the Facility's RCRA Permit during the fourth guarter of 2015. In addition, please find enclosed the most recent version of the RFI Schedule, which is dated January 1, 2016 along with the most recent Vapor Intrusion ICM Monitoring Report for the fourth guarter of 2015, for your review and use. If you have any questions, please call Lisa R. Thurman at 316/529-7204.

Sincerely,

Steve Hieger Plant Manager

**Enclosure** 

Mostafa Kamal; KDHE

Steven R Hieger

Brad Roberts, USEPA Region VII

David Anderson; GSHI Lisa Thurman: OCC Bruce Clegg; GHD

L1601010

CERTIFIED MAIL: 7013 2250 0001 0126 5841

CERTIFIED MAIL: 7013 2250 0001 0126 5858

RCRA







### Occidental Chemical Corporation, Quarterly Progress Report October 1, 2015 through December 31, 2015

Pursuant to Occidental Chemical Corporation's (OCC) hazardous waste permit KSD007482029, Part II, Section C.13, OCC is submitting this quarterly progress report. This report updates the progress of RCRA Corrective Action activities conducted during the fourth quarter of 2015.

- A quarterly building pressure monitoring and inspection event was completed.
   The completed reporting form is attached hereto.
- Continued operation of the interceptor well network for groundwater control around Occidental's Wichita plant.
- Submitted the Human Health Risk Assessment which was completed in accordance with the EPA-approved Human Health Risk Assessment Work Plan.
- Submitted the Response to EPA Comments and Revised Corrective Measures Study Work Plan.
- Received EPA approval of the Revised Corrective Measures Study Work Plan.
- Submitted the Response to EPA Comments and Revised Human Health Risk Assessment.
- Submitted the third quarter 2015 progress report to EPA.
- On October 8, 2015 a fire occurred in a storage warehouse that contained both liquid and dry sodium chlorite products. The fire was immediately extinguished with an on-site deluge system and responding local fire fighters. There were no community impacts, all plant employees were accounted for, and there were no reported injuries.

A spill notification was submitted to NRC, LEPC, WSCDCH and KEM and follow-up was submitted to those agencies in addition to KDHE and EPA. The original spill notification indicated that 1000 pounds of sodium dichromate and 458 pounds of nitric oxide were spilled/released as a result of the fire. Upon further investigation, it was determined that approximately 1764 pounds of sodium dichromate was spilled to soils and approximately 228 pounds of nitric oxide were released to the air. The RQ's for sodium dichromate and nitric oxide are both 10 pounds.

The clean-up and warehouse repairs were completed and operation is expected to commence in the 1<sup>st</sup> quarter of 2016.





Work scheduled for the first quarter of 2016 includes:

- Complete and submit the second 2015 semi-annual groundwater monitoring report.
- Continue operation of the interceptor well network for groundwater control around Occidental's Wichita plant.
- Respond to any forthcoming EPA comments on the Human Health Risk Assessment and submit a revised report if requested by EPA.
- Begin implementation of the Corrective Measures Study Work Plan.
- Draft and submit a Vapor Intrusion Study Work Plan for on-Site occupied buildings.
- Complete a quarterly building inspection and pressure monitoring event.

Notifications:

None







	CORRECTIVE ACTION CHRONOLOGY
DATE	EVENT
07/07/2008	Draft Work Plan for Indoor Soil Gas Sampling
07/07/2008	Comments to QAPP Addendum 04/18/08
07/07/2008	Spring 2008 Neighbor Results
07/11/2008	Request for Interim Measures for Railroad Tracked Areas
07/25/2008	Revised Asbestos Surface Impoundment SWMU Interim Corrective Measure Implementation Report
07/28/2008	2008 2nd Quarter Progress Report
08/05/2008	Comments to Draft Work Plan for Collection & Analysis of Groundwater Samples (Appendix 9)
08/08/2008	Notice of Plug & Abandonment of DW #4
08/08/2008	Request for Extension of QAPP Comment Response
08/15/2008	Response to Railroad Tracked Areas Interim Measures Letter
08/18/2008	Interim Corrective Measures Implementation Report for Asbestos Surface Impoundment SWMU
09/03/2008	Draft Work Plan for Collection & Analysis of Groundwater Samples (Appendix 9)
09/19/2008	Revised Draft Work Plan for Indoor Soil Gas Sampling
09/22/2008	Comments to Draft Work Plan for Indoor Soils Gas Sampling
09/30/2008	Approval Letter for Work Plan for Indoor Soils Gas Sampling
10/03/2008	Comments to Draft Work Plan for Collection & Analysis of Groundwater Samples (Appendix 9)
10/30/2008	Appendix IX Semi-Annual Groundwater Monitoring Report
11/03/2008	Draft Work Plan for Collection & Analysis of Groundwater Samples
11/21/2008	Off-Site Soils Gas Sampling Data Evaluation Report
11/21/2008	Off-Site Geoprobe Groundwater Investigation Report
01/05/2009	Draft QAPP
01/19/2009	Indoor Soils Gas Sampling Report
01/23/2009	Sub-Slab Soils Gas Sampling
01/28/2009	Semi-Annual Neighbor Well Data
01/28/2009	4 <sup>th</sup> Quarter Corrective Action Report
02/10/2009	Direct Push Investigation Comments to EPA
02/12/2009	Off-Site Geoprobe Groundwater Investigation Report
02/20/2009	Soil Gas Sampling Data Evaluation Comments to EPA
03/19/2009	Soils Gas Sampling Data Evaluation
03/26/2009	2009 Ongoing Activities Cost Estimate
04/20/2009	Off-Site Geoprobe Report



5.4	CORRECTIVE ACTION CHRONOLOGY
DATE	EVENT
04/21/2009	Email responding to QAPP Comments
04/30/2009	Semi-Annual Groundwater Report
04/30/2009	Monitor Well Inspection Summary Report
05/08/2009	Response to Comments for Sub-Slab Soils Gas Sampling Report
06/08/2009	Final QAPP and SAP Reports
06/30/2009	RFI Investigation Work Plan for Landfill, Hex Pits, and Brine Ponds
06/30/2009	ICM Effectiveness Evaluation Report
08/26/2009	Revised RFI Work Plan for Alpha Cake Landfill, Hex Waste Pits and Brine Ponds
09/14/2009	Response to EPA's Comments letter dated July 9, 2009 regarding on-Site vapor intrusion
09/14/2009	On-Site Vapor Intrusion Investigation, Assessment and Interim Corrective Measures Implementation Report
11/30/2009	Draft Penta Area and Shipping RFI Work Plan
12/14/2009	Response to EPA Comments & Submission of Revised Interceptor Well ICM Effectiveness Evaluation Report
12/22/2009	Supplemental Off-Site Soil Gas Sample Collection and Analysis, 1 <sup>st</sup> Quarterly, letter submission
12/30/2009	Preliminary Draft Phase I Summary/Phase II Recommendations letter report
01/15/2010	Response to EPA Comments – On-Site VI, Assessment & Interim ICM Implementation Report
02/12/2010	Final Revision to Interceptor Well ICM Effectiveness Report
02/12/2010	Second 2009 Semiannual Groundwater Monitoring Report
02/16/2010	Received comments from EPA for Penta Area and Shipping RFI Work Plan
02/19/2010	Phase I Summary/Phase II Recommendations Letter Report (final), Alpha Cake Landfill, Hex Waste Pits and Brine Ponds RFI Work Plan
04/30/2010	Response to EPA Comments – Penta Area and Shipping RFI Work Plan
04/30/2010	Revised Penta Area and Shipping RFI Work Plan
05/17/2010	Resampling of MW137S1 Letter to EPA
05/28/2010	Inorganics Area RFI Work Plan
07/09/2010	Received comments from EPA for Inorganics Area RFI Work Plan
08/11/2010	Response to EPA Comments – Inorganics Area RFI Work Plan
08/11/2010	Revised Inorganics Area RFI Work Plan
08/24/2010	First Semiannual Groundwater Monitoring Report
09/23/2010	Groundwater Screening (near MW-140) Investigation Summary Letter
08/24/2010	First Semiannual Groundwater Monitoring Report
09/23/2010	Groundwater Screening (near MW-140) Investigation Summary Letter





DATE	CORRECTIVE ACTION CHRONOLOGY EVENT
09/23/2010	Groundwater Screening (near MW-140) Investigation Summary Letter
10/4/2010	Operation and Maintenance Plan for On-Site Vapor Intrusion ICM for on-Site buildings
10/15/2010	RFI Summary Report for the Alpha Cake Landfill, Hex Waste Pits and Brine Ponds
10/29/2010	Supplemental Quarterly Off-Site Soil Gas Monitoring Summary Report
12/20/2010	Response to EPA Comments on the Operation and Maintenance Plan for On-Site Vapor Intrusion ICM for on-Site buildings
12/16/2010	Received comments from EPA for Supplemental Quarterly Off-Site Soil Gas Monitoring Summary Report
12/16/2010	Received comments from EPA for RFI Summary Report, Alpha Cake Landfill, Hex Waste Pits and Brine Ponds
12/30/2010	Comprehensive Well Survey letter submittal to EPA
1/4/2011	Penta Area and Shipping RFI Summary Report
1/17/2011	Response to EPA comments and revised Supplemental Quarterly Off-Site Soil Gas Monitoring Summary Report
1/18/2011	Response to EPA comments and revised RFI Summary Report – Landfill Areas
2/16/2011	Inorganic Area RFI Summary Report
2/23/2011	Second 2010 Semiannual Groundwater Monitoring Report
3/2/2011	Draft Conceptual Design Summary for Groundwater ICM Modifications
4/18/2011	Chloromethanes I, II, Perc and Hazwaste Areas RFI Work Plan
4/18/2011	Arkema Area Investigative Work Plan
4/29/2011	Response to EPA comments and revised RFI Summary Report – Penta Area and Shipping
4/29/2011	Response to EPA comments and revised RFI Summary Report – Inorganics Area
5/2/2011	On-Site Vapor Intrusion Mitigation ICM Construction Completion Report
6/17/2011	Response to EPA comments and revised Preliminary Conceptual Design Groundwater ICM Modifications Rpt
6/30/2011	On-Site Groundwater RFI Work Plan
6/30/2011	Vapor Intrusion ICM Inspection and Pressure Monitoring Record Report Form
7/20/2011	Response to EPA comments and revised Arkema Area Investigative Work Plan
8/1/2011	Response to EPA comments and revised On-Site Vapor Intrusion Mitigation ICM Construction Completion Rpt
8/18/2011	First 2011 Semiannual Groundwater Monitoring Report
8/22/2011	Response to EPA comments and revised Penta Area and Shipping RFI Summary Report
8/22/2011	Response to EPA comments and revised Chloromethanes I, II, Perc and Hazwaste Areas RFI Work Plan
8/26/2011	Response to EPA comments and revised Conceptual Design Groundwater ICM Modifications Report
8/26/2011	Response to EPA comments and revised Conceptual Design Groundwater ICM Modifications Report
9/12/2011	Response to EPA comments and revised Groundwater Monitoring Program Summary Table





DATE	CORRECTIVE ACTION CHRONOLOGY
9/30/2011	EVENT Response to EPA comments and revised Arkema Investigative Work Plan
10/31/2011	Vapor Intrusion ICM Inspection and Pressure Monitoring Record Report Form
11/14/2011	Received EPA comments on On-Site Groundwater RFI Work Plan
11/14/2011	
11/30/2011	Received EPA approval letter for Arkema Area Investigative Work Plan
12/14/2011	Sampling and Analysis Plan Response to Comments and Revised On-Site Groundwater RFI Work Plan
	•
1/5/2012	EPA Comments on Draft Sampling and Analysis Plan  EPA Comments on On-Site Groundwater RFI Work Plan
1/27/2012	
2/8/2012	Response to Comments and Revised Sampling and Analysis Plan
2/20/2012	Second 2011 Semiannual Groundwater Monitoring Report
3/9/2012	Revised Sampling and Analysis Plan (SAP)
3/13/2012	Revised Standard Operating Procedures 4 for SAP
3/19/2012	Response to Comments and Revised On-Site Groundwater RFI Work Plan
3/21/2012	EPA Approval letter – On-Site Groundwater RFI Work Plan
4/17/2012	Stormwater Ponds Area RFI Work Plan
4/17/2012	Fuel Depot Area RFI Work Plan
8/6/2012	
8/6/2012	Chloromethanes I, II, Perc and Hazwaste Areas RFI and Arkema Area Investigation Summary Report
8/13/2012	Response to Comments and Revised Stormwater Ponds RFI Work Plan and Revised Fuel Depot RFI Work Plan
8/14/2012	Inorganics Area Supplemental Report
8/17/2012	
8/24/2012	First 2012 Semiannual Groundwater Monitoring Report
11/14/2012	Class I Modification Letter for Additional SWMUs
11/15/2012	Phase I On-Site Groundwater Investigation RFI Summary Report
2/22/2013	Second 2012 Semiannual Groundwater Monitoring Report
3/7/2013	Response to EPA Comments and Revised Penta Area and Shipping Phase II RFI Summary Report
3/15/2013	Response to EPA Comments and Revised Phase I On-Site Groundwater RFI Summary Report
3/22/2013	Fuel Depot and Stormwater Ponds Area RFI Summary Report
4/19/2013	EPA approval letter – Revised Phase I On-Site Groundwater Summary Report and Revised Phase II Penta Area and Shipping RFI Summary Report
4/24/2013	Monitoring Well Abandonment and Replacement letter





DATE	CORRECTIVE ACTION CHRONOLOGY EVENT
4/25/2013	EPA approval letter – Fuel Depot and Stormwater Pond Area RFI Summary Report
8/22/2013	First 2013 Semiannual Groundwater Monitoring Report
2/25/2014	Second 2013 Semi-Annual Groundwater Monitoring Report
2/25/2014	Phase II On-Site Groundwater RFI Summary Report
3/11/2014	
5/16/2014	EPA Comments – Phase II On-Site Groundwater Investigation RFI Summary Report
6/6/2014	Class I Permit Modification Letter, Additional Solid Waste Management Unit
6/19/2014	Response to EPA Comments and Phase II On-Site Groundwater Investigation RFI Supplemental Report
6/20/2014	Notification of Plant Changes Letter (Sump 426)
7/28/2014	Notification of Plant Changes Letter (Sump 426)  Notification of Plant Changes Letter (Deep Well No. 3 cellar modifications)
8/22/2014	First 2014 Semi-Annual Groundwater Monitoring Report
9/4/2014	<b>V</b> 1
11/26/2014	EPA approval letter – On-Site Groundwater Investigation RFI Summary Report
12/18/2014	Additional Monitoring Well Installations and Groundwater Screening Locations Letter Human Health Risk Assessment Work Plan
12/18/2014	
	Final Comprehensive RFI Summary Report
2/13/2015	Notification of Plant Changes Letter (Sump 417)
2/23/2015	Second 2014 Semi-Annual Groundwater Monitoring Report
3/24/2015	Response to EPA Comments and Revised Comprehensive RFI Summary Report
4/2/2015	Response to EPA Comments and Revised Human Health Risk Assessment Work Plan
4/24/2015	EPA Approval Letter – Revised Human Health Risk Assessment Work Plan
6/4/2015	EPA Approval Letter – Revised Comprehensive RCRA Facility Investigation Summary Report
7/27/2015	First 2015 Semi-Annual Groundwater Monitoring Report
9/3/2015	Human Health Risk Assessment
9/3/2015	Corrective Measures Study Work Plan
10/22/2015	Response to EPA Comments and Revised Corrective Measures Study Work Plan
11/10/2015	EPA Approval Letter - Revised Corrective Measures Study Work Plan
12/29/2015	Response to EPA Comments and Revised Human Health Risk Assessment



## Pressure Measurement Record Administration Building, Technical Center, Control Laboratory

Technician <sub>Jeremy</sub> Raye Name:			Date 11/20	)/15
Equipment and Calibra	tion			
Pressure Meter Make, Mo		ier Units	Zero Calibration	
Omniguard V. 8.0		in WC	<b>▼</b> P	ass Fail
Unusual weather condition	ns yes 🗸	/no		reads 0.000 when both
s		_   Ы	—   ports are open t	o ambient air.
Pressure measurement req inches of water (in WC) or I readings collected over a h	ess (0.001 pr	eferred). The recorde	ed pressure measurem	ent will be the average of
Administration		Half-Hour Average		
Building	Time	Differential Pressure	Minimum Effective +0.001 in WC	Notes
		(in WC)	10.001111770	
Second Floor	14:25	0.037		Good
Cafeteria	13:50	0.024	Pass Fail	Good
Basement	13:15	0.031	✓ Pass Fail	Good
Note: Inlet 1 should be ope	n to indoor air	r. Inlet 2 (Reference)	should be connected t	o the outdoor air tubing.
Technical Center (R&D Lab)	-	Half-Hour Average Differential Pressure	Minimum Effective	Notes
(R&D Lab)	Time	(in WC)	+0.001 in WC	
North Basement	15:00	0.021	✓ Pass Fail	Good
South Basement	15:40	0.032	✓ Pass Fail	Good
Note: Inlet 1 should be ope	n to indoor ai	r. Inlet 2 (Reference)	should be connected	to the outdoor air tubing.
Control		Half-Hour Average	Minimum Effective	Notes
Laboratory	Time	Differential Pressure (in WC)	+0.001 in WC	110.03
Lab Area	16:25	0.056	✓ Pass Fail	Good
Note: This monitoring local	tion is outside	the building (unlike t	he Administration Build	ling and Technical Center)
and the tubing should be of (Reference) should be ope			be connected to the ir	ndoor air tubing. Inlet 2
, , , , , , , , , , , , , , , , , , , ,				
Notes:				
All measuring points	passed.			

Upon completion, this form should be sent to the OXY Wichita Environmental Department (Lisa Blair) or Conestoga-Rovers & Associates (Doug Soutter: dsoutter@craworld.com).



# Building Inspection Record Administration Building, Technical Center, Control Laboratory

Technician Jeremy Raye	Date
Name:	11/20/15

dministration uilding	Building Inspection Notes (Building Envelope and Floors)		
Second Floor	Good		
Cafeteria	Good		
Basement	Good		
Basement  Additional details and corrective action			

echnical Center R&D Lab)	Building Inspection Notes (Building Envelope and Floors)		
North Basement	Good		
South Basement	Good		
Additional details and corrective act	ion		

Control Laboratory	Building Inspection Notes (Building Envelope and Floors)	
Lab Area	Good	
Additional details and corrective action	on	

Upon completion, this form should be sent to the OXY Wichita Environmental Department (Lisa Blair) or Conestoga-Rovers & Associates (Doug Soutter: dsoutter@craworld.com).



#### **Occidental Chemical Corporation**

4 6 3 4

Wichita Facility RFI Schedule December, 2015



